

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241029458 A

(19) INDIA

(22) Date of filing of Application :23/05/2022

(43) Publication Date : 27/05/2022

(54) Title of the invention : ANTIOXIDANT ENRICHED WINE PRODUCTION FROM COFFEE BEANS AND ITS THERAPEUTIC VALUE

(51) International classification :A23F0005040000, C12G0003020000, A23F0005020000, G01N0033140000, A23F0005160000

(86) International Application No :NA
 Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
 Filing Date :NA

(62) Divisional to Application Number :NA
 Filing Date :NA

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(57) Abstract :
 The unique processing of wine from coffee beans of Arabica and Robusta produces special attributes to the beverage and could increase its antioxidant properties. Coffee arabica have about half amount of caffeine when compared to coffee Robusta. The main objective of this study was comparing the antioxidant properties of these two coffee beans and its effects on the wine production. Coffee beans consists of tri glycerol and fatty acids along with antioxidants. It also possesses some biologically active fatty acids that are anti-cancerous, anti-inflammatory, antibacterial, antidiabetic and anti-atherosclerotic in nature. The difference in the fermentation process of the coffee bean affects the taste and quality of the coffee beans. Wine making is the production of wine starting with the selection of the high quality of beans and its fermentation to the alcohol and the bottling of finished liquid. The benefits of coffee beans and wine when consumed in moderation may be act similar such as increasing life span, boosting blood flow and diminishing the risk of depression. The parameters analysed were physicochemical properties like total soluble sugar content, acidity test, antioxidant content, alcoholic content and sensory analysis. Through this constant processing and analysing will be result good quality coffee wine. Thus, the proposed method can be used for the evaluation of authenticity of Arabica and Robusta Wine coffee.

No. of Pages : 5 No. of Claims : 4

(54) Title of the invention : BIOACTIVE COMPOUNDS ENRICHED SPICED DARK CHOCOLATE

(51) International classification :A61K0036670000, A61K0036480000, A61K0036710000, A23G0001000000, A23L0033105000

(86) International Application No Filing Date :NA :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number Filing Date :NA :NA

(62) Divisional to Application Number Filing Date :NA :NA

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(57) Abstract :

Functional foods are a new category of products that are targets new generation consumers. Chocolate processing consists of several process which, starting from cocoa beans, involves, sun drying, roasting, grinding, tempering and conching. A rare combination of spices such as Nigella seeds, Long pepper (Thipili), Cinnamon, Star anise, Black stone flower, Cumin seeds, Fenugreek seeds which are known to have antimicrobial and anti-diabetic properties are used in the formulation of the dark chocolate. The bioactive components in Nigella seeds, Long pepper & Cumin seeds, Cinnamon, Star anise, Fenugreek seeds and Black stone flower are Thymoquinone, Piperine, cinnamaldehyde, Anethole, Galactomannan and Flavonoids that are found to reduce cholesterol and blood glucose levels. During chocolate processing, the above mentioned spices are added to the cacao powder prior to conching. The properties such moisture, colour, consistency, melting properties, odour, texture and taste of the chocolate will be investigated based on the formulations with additives and without additives. Chocolate mix are weighed in the ratio form of Cacao powder, Cocoa Butter, low calorie sweetener, Nigella seeds, Long pepper, Cinnamon, Star anise, Black stone flower, Cumin seeds, Fenugreek seeds and stabilizer using Response Surface Methodology. The quality of good spice dark chocolate will be analysed based on physicochemical analysis (pH, Brix, viscosity, and colour), sensory properties (basic taste intensities) and shelf-life analysis. The spiced dark chocolate is majorly beneficial for cardiovascular diseases, cholesterol and blood sugar lowering effects, curing cough etc.p

No. of Pages : 5 No. of Claims : 4

(54) Title of the invention : BIODEGRADABLE PACKAGING MATERIAL INCORPORATED WITH ANTIMICROBIAL PROPERTIES

<p>(51) International classification :A01N0065260000, A01N0043900000, A23L0029231000, C08J0005180000, C09D0005140000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr.G. Jeevarathinam Address of Applicant :Associate Professor & Head /FT Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 2)Ms.T. Nivetha Address of Applicant :Assistant Professor /FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 3)Mrs. G. Nageswari Address of Applicant :Assistant Professor /FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 4)Ms. N. Princy Address of Applicant :Assistant Professor /FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 5)Ms. R. Dharshana R Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 6)Ms. Niharika Bipin Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- 7)Ms. Ronitalini C Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. -----</p>
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(57) Abstract :

ANNEXURE3 Food and agricultural wastes are thrown as land dumps causing heavy water, air and land pollution. An efficient utilization technique could help in reducing such land dumps. An overview of the developed biodegradable packaging material incorporated with antibacterial properties using pectin from mango peel and neem seed oil is shown here. Most of the fruits are utilized effectively for their pectin content; while mango pectin is left underutilized. It is a popular seasonal fruit that has heavy demand, but once the pulp is extracted the peel is thrown as waste. The mango peel that is categorized as waste material is largely available and can be treated and used for effective pectin extraction. This compound was extracted from mango peel (Mango pectin is extracted from mango peel powder with a particle size of 300um) using the microwave-assisted technique which gave a maximum yield of 28%and FTIR test was done for the extracted pectin. Another conveniently available product was neem seed which contains antibacterial property like Azadirachtin, a complex tetranortriterpenoid limonoid. The extraction of neem seed oil using the Soxhlet Extraction Method was done that gave a yield of 43.71%. This oil can be used to impart the antimicrobial properties into the packaging material. Both pectin and neem seed oil were mixed and incorporated with a combination of PEG and Sorbitol plasticizers for better physical properties. The developed film is then subjected to various tests such as biodegradability test, DSC, SEM, Tensile strength, Temperature Resistance, Water Vapour Transmission Rate which were conducted to check its physiochemical properties. In addition to these tests the developed packaging material was tested with different ambient temperature (room temperature, cold temperature and elevated temperature).Hence, a modified method of waste utilization has been focused on this work. In conclusion, the film produced is used as an effective defensive mechanism for microbe's likeVibrio vulnificus, Salmonella typhi, Staphylococcus aureus and Escherichia Coli. Agar Well Diffusion Method and Streak method was carried out showing better efficient zone of inhibition in comparison to the prototypes. The bio-packaging material showed faster degradation in weeks and increased soil productivity by enhancing PGPR.

No. of Pages : 6 No. of Claims : 4

(54) Title of the invention : ENRICHMENT OF NUTRITIONAL PROFILE IN ICE CREAM USING COCONUT MILK, STEVIA AND PAPAYA PULP

(51) International classification :A23G0009400000, A23G0009340000, A23G0009320000, A23G0009420000, A23G0009380000

(86) International Application No :NA
 Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
 Filing Date :NA

(62) Divisional to Application Number :NA
 Filing Date :NA

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(57) Abstract :
 The study was conducted to develop a low fat nutrition enriched ice cream using coconut milk, stevia, papaya pulp and coconut milk cream. This research focuses on replacement for regular dairy-based ice cream with calorific value of 207 cal/100g. Stevia, a zero-calorie sweetener can be added as a substitute For the sugar in the ice cream preparation. Dairy based ice cream can be used as a control. The coconut milk was extracted from the white meat and it was pasteurized and homogenized. Stevia and grinded papaya pulp can be added to the pasteurized homogenized coconut milk. A cream of 5 ml was prepared and added to the above mixture. To get proper texture and consistency the entire mixture was churned for 30 minutes and hardened at -18± 2°C. The final product is packed in LDPE pouches and stored at -12° to -15°C. The proximate, microbial and sensory analysis were tested for the end product. The experiment results for proximate analysis were found as energy (170 cal), carbohydrate (18 g), fat (6 g), saturated fat (3.9g), poly unsaturated fat (0.38g); Mono unsaturated fat (1.93g), trans fat (0.0g), protein (2.36g), total sugar (16.5g), dietary fiber (0.57g), iron (0.1g) respectively. The results for microbial analysis showed that the total Bacteria count was found as 10,000 cfu/gm (Max. requirement as per FSSAI is 50,000 cfu/gm), and yeast and mold, coliform, salmonella, shigella were found as absent. The sensory attributes were analyzed using 9-point hedonic scale. The average score of 8 was obtained and it showed the acceptance of the product by the panel members. The obtained data was analyzed and the results showed that the utilization of stevia powder as sugar substitute gave highly significant effect on ice cream sugar content, total calorie and its activity. As per FSSAI requirement, the microbial load is in acceptable limit and the product has sufficient nutritional profile. Therefore, the product is declared for marketing and considered as fit for consumption. Hence, it was concluded that the combination of stevia, lightened coconut milk, coconut milk cream, papaya pulp and nuts produced the best ice cream with more nutrients compared with control.

No. of Pages : 6 No. of Claims : 3

(54) Title of the invention : FIBER ENRICHED VEGAN BASED GLUTEN FREE COOKIES INFUSED WITH COCONUT OILCAKE AND BUCKWHEAT

<p>(51) International classification :A23L0033105000, A23L0033000000, A23L0007100000, A23L0033185000, A23L0002520000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY Address of Applicant :VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr. G. JEEVARATHINAM Address of Applicant :ASSOCIATE PROFESSOR & HEAD/FT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 2)Ms. T. NIVETHA Address of Applicant :ASSISTANT PROFESSOR/FT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 3)Mr. S. DILLWYN Address of Applicant :ASSISTANT PROFESSOR/FT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 4)Ms. R. NAVARASAM Address of Applicant :ASSISTANT PROFESSOR/FT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 5)Ms. HRIDHIKA T B Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 6)Mr. MOHAMMED ROSHAN C Address of Applicant :HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. ----- 7)Mr. AFRID KAMAL P T Address of Applicant :ASSISTANT PROFESSOR/FT, HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641032. -----</p>
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(57) Abstract :

Oilseed cakes are the major byproducts obtained after oil extraction in the edible oil industries, considered an agro-industrial waste. These contain high amounts of bioactive compounds, carbohydrates, lipids, organic acids, proteins, vitamins, minerals, and antioxidants with numerous health benefits. Therefore, the present study aimed to utilize edible oilseed cakes for the preparation of foods for human consumption after undergoing suitable heat treatment. We have chosen coconut de-oiled cakes which have been mainly used for feeding cattle and these oilseed cakes are rich in nutrients like proteins, carbohydrates, antioxidants, fiber, vitamins and minerals. Here it is planned to develop fiber enriched gluten free and vegan based cookies infused with coconut de-oiled cake and buckwheat which will be a suitable nutraceutical for diabetic patients because of the presence of dietary fiber and coconut sugar (sugar substitute). Buckwheat is a gluten-free crop that possesses high nutritional value due to the presence of several bioactive compounds such as rutin and quercetin etc. We have selected buckwheat flour for the preparation of cookies, which is a nutrient-rich, gluten-free plant source, which may boost heart health, reduce blood pressure, aid weight loss, and help manage diabetes. Along with this, the coconut de-oiled cake is free from Anti-nutrients and hence the bioavailability of protein and bioactive compounds are higher. The purpose of the project is the complete utilization of the raw materials which can be incorporated into value-added products which have many health benefits. The nutritional composition of raw materials and cookies will be evaluated such as moisture, ash, dietary fiber, protein, carbohydrates, fats, flavonoid, caloric value and sensory evaluation will be conducted for consumer acceptance. The amount of dietary fiber and carbohydrate will be calculated according to RDA given by ICMR regulations.

No. of Pages : 5 No. of Claims : 4

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CHALLAN : TR-5
DOCKET NO:90017

Date/Time : 14/10/2020

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Sr. No.	CBR No.	Reference Number /Application Type	Application Number	Title/Remarks	Amount Paid
1	34547	ORDINARY APPLICATION	202041044700	PRODUCTION OF BIODEGRADABLE PLASTIC FROM ORGANIC FLOUR AND THE METHOD OF PREPARATION THEREOF	1750
2		E-101/10924/2020-CHE	202041044700	Correspondence	0
3		E-2/3002/2020-CHE	202041044700	Form2	0
4		E-3/31900/2020-CHE	202041044700	Form3	0
5		E-5/2820/2020-CHE	202041044700	Form5	0
6	34547	E-12/2784/2020-CHE	202041044700	Form9	2750
7	34547	R20204032041	202041044700	Form18	4400
Total :					8900

Received a sum of Rs. 8900 (Rupees Eight Thousand Nine Hundred only) through

Payment Mode	Bank Name	Cheque/Draft Number	Cheque/Draft Date	Amount in Rs
Draft	City Union Bank Ltd.	863217	09/10/2020	8900

Note: This is electronically generated receipt hence no signature required.

(54) Title of the invention : PRODUCTION OF A BIOCHEMICAL SOLUTION FOR GINGER PEEL REMOVAL BY CITRIC ACID BLEND FROM FOOD WASTE AN

<p>(51) International classification :C12P0007480000, C11D0003382000, B09B0003000000, A61K0036906800, A61K0008365000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p>1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p>1)Dr.G. Jeevarathinam Address of Applicant :Associate Professor& Head /FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. -----</p> <p>2)Ms.T. Nivetha Address of Applicant :Assistant Professor / FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- ---</p> <p>3)Ms.C. S. Neethu Address of Applicant :Assistant Professor/ FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- ---</p> <p>4)Dr. M Seenuvasan Address of Applicant :Professor & Head-Chemical, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. ----- ---</p> <p>5)Ms. Farhana Rasheed Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. -----</p> <p>6)Ms. Keerthana J M Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032. -----</p>
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(57) Abstract :

ANNEXURE 3 The idea of the project is to find an effortless way to remove the ginger peel because of its unorganized shape. We are preparing a solution which contains some acids that make the ginger peel tender to be removed. To make this solution we opted for a biological method of obtaining acid like citric acid which will make the ginger peel soft enough. The most notable sources of citric acid are citrus fruits like lemon, lime and orange, which contains highest level of natural citric acid. Citric acid is prepared by *Aspergillus Niger* in a submerged fermentation using lemon peels. Pineapple waste is dried and powdered which is added to the solution that contains citric acid. As the solution mostly makes use of the waste product due to which it can be considered as waste management technique. This solution can be reused for peeling the ginger after several uses. Due to the easy peeling technique, time is conserved and on the other hand it utilizes the waste too

No. of Pages : 5 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241029695 A

(19) INDIA

(22) Date of filing of Application :24/05/2022

(43) Publication Date : 03/06/2022

(54) Title of the invention : PRODUCTION OF BIODEGRADABLE CUTLERY USING GROUNDNUT SHELL

(51) International classification :C10L0005360000, C12P0007100000, A61K0036480000, B65D0065460000, C05D0009000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
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(57) Abstract :

ANNEXURE 3 Groundnut shells are managed under agricultural wastes where the groundnuts are extracted and the shell wastes are either used for Biomass or feed for cattle. But groundnut shells consist of sizable amount of cellulose content in form of cellulose and hemicelluloses. So groundnut shells consist of about 35.7 % of cellulose and 18.7 % of hemicelluloses when its content is expressed in percentage. It is also combined with a component called Lignin (12 %). Lignin acts as a binding agent. We have selected groundnut shells because groundnut crops are cultivated in both Kharif and Rabi season. The proper utilization of the fibre content in groundnut shells could produce agricultural based value added products. The cutlery items produced by groundnut shell are biodegradable and have a high shelf life. It can also reduce the usage of plastic cutleries. The natural cellulose content in groundnut shell also makes our products into compost after use. The cutleries made out of groundnut shells are also harmless to animal when it's intake. Our purpose of the project is to create a plastic less ecosystem and achieve sustainable development and green economy.

No. of Pages : 5 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041044700 A

(19) INDIA

(22) Date of filing of Application :14/10/2020

(43) Publication Date : 30/10/2020

(54) Title of the invention : PRODUCTION OF BIODEGRADABLE PLASTIC FROM ORGANIC FLOUR AND THE METHOD OF PREPARATION THEREOF

(51) International classification	:C08J 11/16	(71) Name of Applicant : 1)S. KAVITHA
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(32) Priority Date	:NA	COIMBATORE, TAMIL NADU, INDIA-641008. Tamil Nadu
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Filing Date	:NA	

(57) Abstract :

ABSTRACT OF THE INVENTION Title: Production of biodegradable plastic from organic flour and the method of preparation thereof This invention discloses the composition to prepare biodegradable plastic comprising organic flour, polymer and plasticizer. To prepare the biodegradable plastic, organic flour, polymer and plasticizer in the ratio 1:0.6:0.2 are mixed together with water base. It is further mixed with a mechanical stirrer and heated to induce polymerization reaction. The collected semisolid form is casted as a film and dried in a suitable mold to get the desired shape. The present invention produces a biodegradable plastic that can be used as a packaging material and container.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241029693 A

(19) INDIA

(22) Date of filing of Application :24/05/2022

(43) Publication Date : 03/06/2022

(54) Title of the invention : PRODUCTION OF LOW COST SNACK INCORPORATED WITH MULTI-SEED FLOUR

(51) International classification :A23L0007100000, A21D0002360000, A23L0025000000, A23L0019000000, A23L0011000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :

In recent times, people are not able to eat nutritious food because of the busy schedules and they are easily switched to fast food. Consumption of these multi seed products in daily life can full fill all nutritional requirements of the body. By keeping in above facts, the objective is to develop a value added nutrient rich multi seed flour snack product. The multi seed flour mixture is composed of four types of flour including of buck wheat flour and other seed flours like pumpkin seed, sesame seed, flaxseed, which are great sources of fiber. The product prepared was evaluated for color, flavor, taste, texture appearance and overall acceptability using 9 point hedonic rating. The sensory score revealed that some of the products like pancake, spaghetti, biscuits, noodles and other snacks may be made from multi seed flours as the sensory properties were similar with control samples. The cost economics was studied and it was found as on par with other control products. On the basis of findings, it was concluded that the prepared multi seed flour mixture (buckwheat, pumpkin seed, Sesame seeds, flax seeds) can be successfully used for the preparation of snacks like pancakes, spaghetti, biscuits etc. An investigation was undertaken to standardize the processing for multi seed flour snacks. The flour prepared with 100% multi seeds was found to be acceptable as compared with other level of proportions. The sensory score such as aroma, appearance, color, taste, flavor, texture, and sweetness/saltiness were found better compared to products made from normal flour. The best sensory score and other nutritional properties were found better in 100% multi seed flour combination compared to other combinations and control. The seed and flour ratios were significantly (P<0.05) influenced the proximate and sensory analysis of the end product.

No. of Pages : 8 No. of Claims : 4

(54) Title of the invention : READY TO SERVE HEALTH DRINK FOR DIABETES INCORPORATED WITH TINOSPORA CORDIFOLIA

<p>(51) International classification :A61K0036590000, A61K0036610000, A61K0031700000, A61B0005145000, A23L0033105000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Hindusthan College of Engineering and Technology Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr.G. Jeevarathinam Address of Applicant :Associate Professor& Head /FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>2)Ms.T. Nivetha Address of Applicant :Assistant Professor / FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>3)Mrs. G. Nageswari Address of Applicant :Assistant Professor / FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>4)Ms. N. Princy Address of Applicant :Assistant Professor / FT, Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>5)Ms. Sivani V Gopal Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>6)Mr. AlphinThampi Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p> <p>7)Mr. V.S. Visal Address of Applicant :Hindusthan College of Engineering and Technology, Valley Campus, Pollachi Highway, Coimbatore, Tamilnadu, India 641032 ----- -----</p>
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(57) Abstract :

The main objective of the research is to develop a Ready-To-Serve drink as a supplement for diabetes using Tinospora cor difolia as major ingredient. This RTS drink gives the targeted community a chance to reduce their medicine consumption. This drink is proposed to be made of Tinospora cor difolia, guava, sesame and stevia. Tinospora cordifolia is a highly potent herb used in ayurveda to combat diabetes and keep the function of various organs in harmony. Tinospora Cordifolia is rich in biologically active phy to constituents including alkaloids, tannins, cardiac glycosides, flavonoids, saponins and steroids which helps to maintain blood sugar level. Guava is rich source of ascorbic acid, the fruit without peel is more effective in maintaining low blood sugar as well as serum total cholesterol. White sesame seeds are good source of monounsaturated and polyunsaturated fat, vitamins, minerals, antioxidants and aids to control blood sugar. Stevia is a healthy sugar substitute that has very low glycemic index as it in turn controls rise in blood glucose level. The process will be initiated by collecting the raw materials which will be subjected to preliminary treatments like cleaning, washing, sorting, peeling, cutting, etc., Formulation and optimization of ingredients will be done using RSM (Box behnen design) and processing of drink will be accomplished using pasteurization. The developed product will be tested and analysed for its physico-chemical properties such as pH, acidity, TSS (brix), turbidity, energy content, microbiological analysis, shelflife estimation, sensory evaluation and cost analysis. Efficacy of the drink in controlling diabetes will be tested and results interpreted.

No. of Pages : 5 No. of Claims : 3